蝶と蛾 Trans. lepid. Soc. Japan 51 (3): 247-250, June 2000

A new species of the genus *Paranthrenopsis* Le Cerf, 1911 (Lepidoptera, Sesiidae) from China

Oleg G. GORBUNOV¹⁾ & Yutaka Arita²⁾

 Institute for Problem of Ecology and Evolution, Russian Academy of Sciences, Leninsky prospekt 33, Moscow V-71, 117071 Russia; e-mail: ogorbu@orc.ru
Zoological Laboratory, Faculty of Agriculture, Meijo University, Tempaku-ku, Nagoya, 468-8502 Japan; e-mail: arita@meijo-u.ac.jp

Abstract A new species, *Paranthrenopsis siniaevi* sp. nov., is described and figured from Shaanxi Prov., China.

Key words Lepidoptera, Sesiidae, *Paranthrenopsis siniaevi* sp. nov., Palaearctic region, China, taxonomy.

In our recent review of Palaearctic Sesiidae (Spatenka et al., 1999) we included in the genus Paranthrenopsis Le Cerf, 1911 two species, namely P. editha (Butler, 1878) (the type species) and P. pogonias (Bryk, 1947). However, re-examination of the type specimens of the latter species displayed that it is not congeneric with P. editha. Therefore we exclude Entrichella pogonias Bryk, 1947 from the genus Paranthrenopsis. The exact generic position of E. pogonias and other related species is discussed in a separate paper (Gorbunov & Arita, in press.). Thus, for the present time the genus Paranthrenopsis Le Cerf, 1911 is represented in the eastern part of the Palaearctic region by two species, P. editha (Butler, 1878) and P. siniaevi sp. nov.

The holotype of the new species is deposited in the senior author's collection (COGM).

This study is supported in part by the Russian Academy of Sciences, Biodiversity Project, Programmes 0001 N, No. 1. 1. 11.

Paranthrenopsis siniaevi sp. nov. (Figs 1-2)

Description. Female (holotype) (Fig. 1). Alar expanse 29.6 mm; body length 13.3 mm; forewing 13.4 mm; antennae with broken off tips.

Head: antennae broken off, but basal parts entirely dirty yellow-orange; from brown with bronzed-purple sheen; labial palpus entirely dirty yellow-orange with golden sheen; vertex dirty yellow-orange with golden sheen, with admixture of brown scales with bronzed sheen; occipital fringe dirty yellow-orange.

Thorax: patagia brown with purple sheen, with admixture of dirty yellow-orange scales with golden sheen anteriorly and with a large dirty yellow-orange spot laterally; tegulae brown with bronzed-purple sheen, with yellow scales distally; mesothorax brown with bronzed-purple sheen, with admixture of dirty yellow-orange scales distally; metathorax brown to dark brown with purple-green sheen, with a tuft of dirty orange hair-like scales laterally; laterally thorax grey-brown with strong purple sheen, densely mixed with dirty yellow-orange scales with strong bronzed-violet sheen; posteriorly metameron dirty yellow-orange; posteriorly metameron yellow to pale yellow with golden sheen.

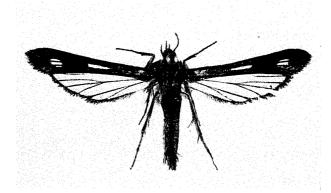


Fig. 1. *Paranthrenopsis siniaevi* sp. nov., holotype $\stackrel{\circ}{+}$. Alar expanse 29.9 mm. (COGM).

Legs: neck plate dirty yellow-orange with bronzed sheen; fore coxa entirely dirty yellow-orange with bronzed sheen, internally pale yellow with golden sheen; fore tibia dirty yellow-orange with bronzed sheen with admixture of brown scales dorsally; fore tarsus entirely dirty yellow-orange with golden sheen; mid coxa dirty yellow-orange with bronzed sheen; mid femur externally dirty yellow-orange with bronzed sheen, with admixture of brown scales, internally pale yellow with golden sheen; mid tibia dirty yellow-orange with golden sheen, with dense admixture of brown scales ventrally; spurs dirty yellow-orange with golden sheen; mid tarsus entirely dirty yellow-orange with golden sheen; hind coxa dirty yellow-orange with bronzed sheen; hind femur externally brown to dark brown with bronzed-purple sheen, with a large, longitudinal, pale yellow spot with bronzed-golden sheen posteriorly, internally pale yellow with golden-green sheen; hind tibia externally dirty yellow-orange with strong golden-bronzed sheen, in basal half exterior-dorsally with admixture of brown to dark brown scales with purple sheen; spurs dirty yellow-orange with golden sheen; hind tarsus dirty yellow-orange with golden sheen.

Abdomen: dorsally dark brown with greenish sheen, with thin admixture of light brown scales; tergite 1 narrowly dirty orange laterally; ventrally entirely dirty yellow to yellow-orange with golden sheen, with admixture of brown scales on sternite 1+2 basally; anal tuft small, dorsally mixed with orange, dark orange and light brown scales, ventrally orange to yellow-orange.

Forewing: dark brown with bronzed-purple sheen, with admixture of individual light brown and yellow scales; anal edge orange; discal spot broad; transparent areas small, densely covered with brownish semi-hyaline scales; anterior transparent area slightly shorter than length of discal spot; posterior transparent area undeveloped; exterior transparent area small, divided into three cells (cell between veins M_3 –Cu A_1 extremely small), level to vein M_1 about 2.5 times as narrow as discal spot and twice as narrow as apical area; cilia dark brown with bronzed sheen.

Hindwing: transparent; veins, and outer margin dark brown with bronzed sheen; discal spot undeveloped; outer margin narrow, about twice as narrow as cilia; cilia dark brown with bronzed sheen, dirty orange anally.

Female genitalia (holotype, genital preparation No. GA-256) (Fig. 2). Papilla analis broad, well-sclerotized; 8th tergite well-sclerotized, with a few long setae posteriorly, narrow ventrally, but about twice as broad dorsally; lamella postvaginalis slightly sclerotized and wrinkled;

A New Species of Paranthrenopsis (Sesiidae) from China

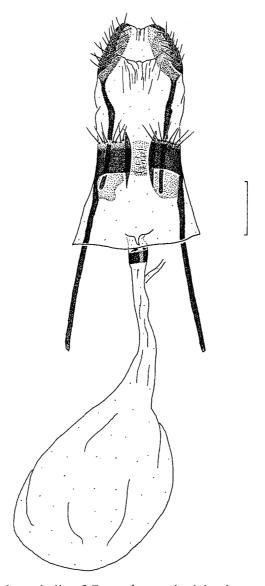


Fig. 2. Female genitalia of *Paranthrenopsis siniaevi* sp. nov., holotype (genital preparation No. GA-256). Scale bar: 0.5 mm.

posterior apophysis rather short and thick, about 1.75 times as short as anterior apophysis; ostium bursae at distal margin of 7th sternite, membranous; antrum short, semicircular; ductus bursae narrow, gradually broadened into corpus bursae; corpus bursae large, elliptical, without signum.

Individual variability. Unknown.

Differential diagnosis. This new species seems to be closest to *P. editha* (Butler, 1878), and it can be separated from female *editha* by the somewhat large size (alar expanse less than 26. 5 mm in *editha*), by the coloration of the vertex (entirely dark brown with purple-green sheen in the species compared), tuft of hair-like scales on the metathorax laterally (paler, yellow-orange in editha), mid and hind tibiae (more dark in the species compared), abdomen (dorsally tergite 4 densely covered with yellow to yellow orange scales; ventrally sternites 3–6 each dark brown with bronzed sheen, with a large yellow spot with golden sheen laterally; anal tuft without light brown scales dorsally in the species compared) and cilia on the

hindwing anally (yellow to pale yellow in *editha*). In addition, this new species can be easily distinguished from P. *editha* by the structure of the external transparent area of the forewing (smaller, divided into two cells, cell between veins R_5 and M_1 distinctly smaller than that between veins M_2 and M_3 in the species compared) and female genitalia (8th tergite visibly less sclerotized; lamella postvaginalis nearly undeveloped; posterior apophysis about as short as anterior apophysis; ductus bursae thicker in *editha*; *cp*. fig. 2 and text-fig. 286 in Spatenka *et al.*, 1999).

Bionomics. The host plant is unknown. The holotype was netted in the first half of August at about 1,900 m a.s.l.

Habitat. The holotype was collected on a small glade inside a deciduous mountain forest.

Distribution. Known from the type locality only.

Material examined. ♀ (holotype) (Fig. 1), China, Shaanxi Prov., S. Taibashan Mts, Tsinling Mts, 1,900 m, Houzhenzi, 33°53′N, 107°49′E, 1–12. VIII. 1999, V. Siniaev & I. Plutenko leg. (genital preparation No. GA-256) (COGM).

Etymology. This new species is dedicated to Mr V. Siniaev (Moscow, Russia), an excellent collector of Lepidoptera and other insects, who collected the holotype of this species.

We would like to express our sincere thanks to Mr V. Siniaev (Moscow, Russia) for donating us a specimen, which has proved to be the holotype of the new species described herein. We also thank Mr M. Ikeda (Tokyo, Japan) for a loan of valuable females of *P. editha* for comparison.

References

Gorbunov, O. G. & Y. Arita, in press. A revision of Felix Bryk's clearwing moth types (Lepidoptera, Sesiidae), at Naturhistoriska Riksmuseet in Stockholm, Sweden.

Spatenka, K., Gorbunov, O., Lastuvka, Z., Tosevski I. & Y. Arita, 1999. Sesiidae—Clearwing Moths. *In* Naumann, C. M. (Ed.), *Handbook of palaearctic Macrolepidoptera* 1: i-xv, 1-569 pp., 57 pls, 504 text-figs. Gem Publ. Co., UK.

摘要

中国産 Paranthrenopsis 属 (鱗翅目, スカシバガ科) の 1 新種 (Oleg G. Gorbunov・有田 豊)

Paranthrenopsis siniaevi sp. nov. (Figs 1-2)

日本産のシラホシヒメスカシバ, *P. editha* (Butler, 1878) に酷似する中国陝西省産の1種を記載した. シラホシヒメスカシバとは、頭頂部、後胸部の長毛、腹部の色彩などがことなることで区別される.

(Accepted March 4, 2000)

Published by the Lepidopterological Society of Japan, 5-20, Motoyokoyama 2, Hachioji, Tokyo, 192-0063 Japan